ABSTRACT

The energy at which a transmit power control is transmitted is set based on how important it is that the transmit power control command is received.. As an indication of how important it is that the transmit power control command is received, a difference between a measured quality, e.g., SIR, of a received signal and a reference may be determined. The energy at which the transmit power control command is transmitted may be set based on this difference. The energy of the transmit power control command may be set by adjusting the power at which the transmit power control command is transmitted and/or by adjusting the coding of the transmit power control command. If the difference is determined to be substantially zero, the energy at which the transmit power control command is transmitted is decreased, by an amount that is a function of the difference. If the difference is determined not to be substantially zero, the energy at which the transmit power control command is transmitted is increased by an amount that is a function of the difference. This technique may be used for uplink transmit power control commands or for downlink power control commands. For uplink transmit power control commands, the technique is performed in the network, e.g., in a base station. For downlink transmit power control commands, the technique is performed in, e.g., a remote terminal.